



Music and the Developing Brain.

Musical training has recently gained additional interest in education as increasing neuroscience research demonstrates its positive effects on brain development. Neuroimaging revealed plastic changes in the brains of adult musicians but it is still unclear to what extent they are the product of intensive music training rather than of other factors, such as pre existing biological markers of musicality. In this review, we synthesize a large body of studies demonstrating that benefits of musical training extend beyond the skills it directly aims to train and last well into adulthood. For example, children who undergo musical training have better verbal memory, second language pronunciation accuracy, reading ability and executive functions. Learning to play an instrument as a child may even predict academic performance and IQ in young adulthood. The degree of observed structural and functional adaptation in the brain correlates with intensity and duration of practice.

For a detailed article look [here](#)

Dyslexia Week is a series of competitions spread over one week and which is open to main stream schools that run remedial centers/resource rooms on their campus; and to learning centers that cater to children with Dyslexia. The first event, organized in Chennai in 2014, was an unprecedented success. In 2015 the event was organized in more cities: Salem, Coimbatore and Bengaluru.

The Editors



Rajam Shanker

Classical Music Therapy - an effective Auditory Stimulation and Remediation Tool

Music notes are substantially therapeutic. An individual or group can consciously exercise a choice of playing or listening to a selected Swara, Raga or composition and interpret their own physical and emotional response to the same. This generalization does not hold true when musical notes are employed as a therapeutic intervention.

Music Therapy is client specific and is prescribed by members of the client's treatment team. Members can include doctors, psychologists, teachers, case workers, or parents. Musical interventions are developed and used by the therapist based on his/her knowledge of the music's affect on behaviour, the client's strengths and weaknesses, and the therapeutic goals.

A detailed preliminary evaluation of each client is imperative. Based on the analysis of the data provided, interaction with individual client, the degree of disability and capabilities of the support system(s) available, music therapy sessions are carefully structured. It must be emphasized that no time frame can be prescribed to perceive positive results. Regular, systematic and dedicated sessions will establish noticeable changes in approximately a ten to twelve-week period.

A brief introduction into its employment and method in treating learning disabilities

Dyslexia definitions describe a child with disabilities in the processing and acquisition of language in spite of normal intelligence, normal hearing, normal vision, no known neurological impairments or deficits, and appropriate educational opportunities. Phonological processing deficits are a hallmark of dyslexia and require explicit and systematic instruction (as well as repeated

practice) to build up neuro-pathways. In my own experience, many dyslexics struggle to either split words they hear into separate sounds; for example, the word Alumelamanga has three separate sounds:

Alu-mela-manga, or distinguish word sounds from one another; for example, finding it hard to tell the difference between Gajananam bhoota and Bajanamam poota. Because of this they are more likely to struggle with reading and spelling.

Use of Carnatic Music Components for Dyslexia

Rhythmic auditory stimulation influences syntactic processing in children with developmental language disorders. Musical methods are being increasingly employed to treat both autistic and dyslexic children and adults. Music Therapy trained teachers employ Carnatic Music components like Janta Varisai and Sarali Varisai and variables of Taalams and Swarams - Beats and Notes in the same way they usually break the words into syllables and teach the student to clap and tap for each syllable as they go about repeating them. Clapping and rhythm can also be used to make sequencing and orders that are important in math classes and makes learning the alphabet easier.

Music intervention aimed at improving both pitch and rhythm auditory processing may be successful at remediating some of the behavioural and neural correlates of developmental dyslexia. Results of present studies and practices have shown that singing based music intervention helps children with language-based learning disabilities recover both, normal language and music skills. Music helps the dyslexic kids to concentrate on their auditory and motor timing skills in a simultaneous manner.

Music therapy sessions are designed to take advantage of the innate tendencies in all human beings to **react, respond and resonate**. Sessions are carefully planned, executed and evaluated based on the specific needs of each client. Evaluation of progress in the designated goal areas is completed on a regular basis.

Rajam Shanker is a graduate in Carnatic Music from the

Telugu University, Hyderabad and Sangeeta Alankara with distinction from Akhil Bharatiya Gandharva Mahavidyalaya and National Music University. She was initiated into the practice of Indian Traditional Music Therapy by her mentor and guru, Sangeetha Mahamahopadhyaya Sri Kollegal R Subramanyam, the eminent Vaggeyakara, lyricist, musician and grammarian.

Rajam Shanker and her associates are collaborating with medical and rehabilitation professionals in the employment of Indian classical music in Music Therapy and their work has shown perceivably positive results in treating children and adult clients over a range of medical and developmental disabilities. Therapists from other disciplines, both Indian and overseas have shown keen interest in her group and client specific therapeutic intervention methodology.

A Practicing and Consultant Music Therapist she is associated with individuals and institutions in Hyderabad, Chennai, Bangalore, Mumbai and New Delhi dealing specifically with Autism, Healing, Curative Education and related developmental disabilities in children and adults. She is a Life Member of NADA Centre for Music Therapy & Research India, Member of the WFMT, World Federation of Music Therapy and actively associated with other Music Therapy professionals and organizations in India and abroad.

Over 100 episodes of her informative talks on the significance of different Ragas have been broadcast twice every week on tv7healthplanet, a Telugu Regional Channel, on the Hathaway and Digi Cable networks.

A few have also been uploaded on YouTube. [Browse Music Therapy videos after going to tv7healthplanet on YouTube]

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Musical Intelligence of a Child in Ananya

Sri Rakshita, a Class 8 student of Ananya, has an inherent ability to play the Keyboard. This artistic ability is an intrinsic quality of children with dyslexia.

This song is a medley of Prabho Ganapate, Vandhe Matharam, Sare Jahanse and ending with our National anthem.

You can listen to her play a medley on the Keyboard here: [YouTube https://youtu.be/1E4EFM26G98](https://youtu.be/1E4EFM26G98)



How Playing Music Affects the Developing Brain

Remember “Mozart Makes You Smarter”?

A [1993 study](#) of college students showed them performing better on spatial reasoning tests after listening to a Mozart sonata. That led to claims that listening to Mozart temporarily increases IQs — and to a raft of products purporting to provide all sorts of benefits to the brain.

In 1998, Zell Miller, then the governor of Georgia, even proposed providing every newborn in his state with a CD of classical music.

But subsequent research has cast doubt on the claims. Ani Patel, an associate professor of psychology at Tufts University and the author of “[Music, Language, and the Brain](#),” says that while listening to music can be relaxing and contemplative, the idea that simply plugging in your iPod is going to make you more intelligent doesn’t quite hold up to scientific scrutiny. **Continue reading [here](#).**

For another interesting article on how music can change the brain **read [here](#).**

Dyslexia Week

Madras Dyslexia Association (MDA), in 2014, began organizing Dyslexia Week in the month of November. Dyslexia Week is a series of competitions spread over one week and which is open to main stream schools that run remedial centers/resource rooms on their campus; and to learning centers that cater to children with Dyslexia. The first event, organized in Chennai, was an unprecedented success. In 2015 the event was organized in more cities: Salem, Coimbatore, Bangalore.

Dyslexia Week 2015 was held last year between 11th and 16th of November. Rashmika Learning Center from Coimbatore, Insight Academy and Brindavan Education Society from Bangalore, Helikx Open sSchool and

Learning Centre from Salem decided to join hands with MDA to celebrate Dyslexia Week in their respective cities.

Brindavan Education Society

Brindavan Education Society, Bangalore, had a Literary Festival on November 20, 23 and 24, 2015. It was an event that was filled with learning and fun for children and teachers alike. It gave us yet another opportunity to understand the strengths and vulnerabilities of our children.

The planning for this event began in September, much before the Dussera holidays. The competitions were both at an individual and group level. Rules were framed for all the competitions and groups were formed. Groups were

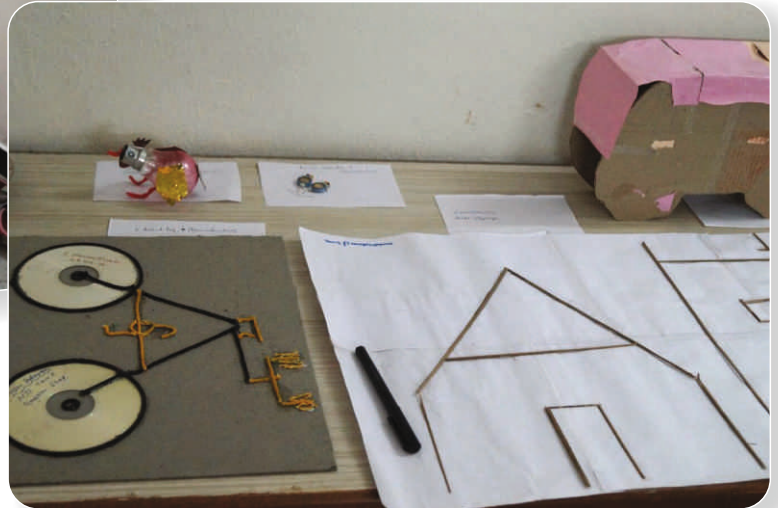
formed keeping in mind the abilities of children in different areas like reading, spelling, writing, creativity, ability to work and lead as a team; and art. Individual competitions were poem recitation and story telling. Group competitions were picture sequencing, creative writing, word boggle, collage and treasure hunt.

Children were given practice in school and also told to practice at home for competitions like Poem Recitation and Story Telling.

We saw feelings of fear, nervousness, joy, excitement and frustration in the children, before and during the competitions. We also saw the feelings of happiness, relief and a sense of achievement after the competitions.

Echoed below is what our children shared about the various events.





Poem Recitation and Story Telling

Poem recitation and story telling was hard, we found it difficult to memorize and recall but we did it.

Poems in other languages were tough to recite.

Both these events were nice but we were scared, nervous and it was difficult to narrate without seeing.

I liked poem recitation and story telling. I missed story telling as I was absent that day.

When I practiced at home million times I never remembered, but here it came.

Why should we memorize? It is so silly.

Finally, I get to say my own story.

Creative Writing

It was a group activity and we liked this.

I never knew I could write so many words.

Creative writing was so tough to do.

Word Boggle

We loved word boggle as we could make many words.

It was a group activity and we liked this.

I did not like word boggle.

Collage

Collage was so interesting to do.

It was a group activity and we liked it.

We did not like collage. It gave me a chance to read up on hockey because sports was the theme.

Treasure Hunt

Treasure Hunt was interesting and we had fun playing it.

It was fun to find the clues.

Liked the coin chocolates that were given.

It was fun to wear the hats.

It was fun to crawl in the tunnel and wear badges.

Could not see inside the tent as it was very dark.

Did not like treasure hunt and found it boring.

Generic sharing and suggestions for future competitions.

In my old school, they didn't take me for any competitions. Here, I participated, I am so happy. We should have no uniforms on those days. We should be given stories that we could narrate in the competition. We should have more such competitions.

Rashmika Learning Centre

The planning and coordination of the events was done by Suresh and Elizabeth of Rashmika centre. Shylaja Ganesan of Vivekalaya and Ramya Dileep of Centre of Academic Intervention also assisted in carrying out the events.

The celebrations started with a walkathon on the morning of 14th November; about 150 students and friends walked along the race course carrying placards and wearing specially made T-shirts that were sponsored by a well wisher of Rashmika.

On 17th, Art from Waste, Skit and Kolam competitions were held. Nearly 150 students participated.

On 18th, painting and music competitions were held at Vivekalaya. Again nearly 150 students participated.

Schools with maximum numbers in participation were also felicitated. Dr Geetha, Head, Special Education



Department, Avinashilingam University was a special invitee.

Helikx Open sSchool and Learning Centre

Helikx Open sSchool and Learning Centre conducted a drawing competition and drama fest.

B.Ed students of Sri Sarada College of Education, Salem attended the Awareness Program on Specific Learning Difficulties.

Celebrate Dyslexia, an awareness program created an impact among the various sections in the society. Nearly 50 educational institutions were impacted and want to join hands with Helikx to support students with learning difficulties and be part of this social responsibility.

Reports collated by

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Centre for Academic Intervention

The years spent in school, teaching children with LD and now to run an 'after-school' centre has been a great transition.

Resource Centres in each school are a practical approach to help children with LD. Many schools have resource centres to attend or cater to their students. But what happens to those students whose schools do not have a centre? Thus was born the "Centre for Academic Intervention", an after-school place to help students with LD.



Having been part of CBSE and Matriculation schools for the last 12 years, running a centre after school hours was the alternate option for students to get help. Here parents are more committed and spend time asking for details about the progress of their wards. They are more relaxed to give their share of information.

At the Centre, students are given help after school hours - twice or thrice a week. The centre approaches various schools to create awareness, act as an interface between parents and principals to talk to parents about LD, when the school refers does assessments and offers help. The Centre also has its support from various hospitals for counselling, speech and occupational therapy, ophthalmologist and so on.

In case of underprivileged students, the Centre would rope in donors to provide monetary support to help undergo tests and take corrective measures. With mentoring from Unlimited Tamilnadu, Pondicherry, the Centre is in its fledgling stage.

In an after-school Centre, it is the parent's responsibility to bring and fetch the student on time. They are more involved, as the acceptance and actions are met. Irregularity and inconsistency is a damper and slows down the progress of the students.

The Centre is run in collaboration with Madras Dyslexia Association (MDA) and has been selected as a social entrepreneur by Unlimited Tamilnadu, Pondicherry.

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Snippets

Heads of Schools Meet

Dyslexia - Symptoms and Solutions

For Harini Mohan's talk on Signs and Symptoms of Dyslexia look [here](#). 



Madras Dyslexia Association along with Rotary Club of Madras Central organized a programme for School Heads on Saturday 7th November 2015. The Chief Guest was Mr. N. Gopalaswami, former Chief Election Commissioner. Mr. Chakravarthy, Secretary Vivekananda Educational Society was a special invitee. The programme was attended by heads of more than 50 schools.

"Helping children to help themselves" was how Mr. Gopalaswami described the work done by organizations like MDA. He stressed the importance of early detection and remediation of dyslexia. Appreciating the organized way in which MDA was functioning, he requested MDA and the Rotary Clubs to work together to render remedial help to children studying in Tamil medium schools in the interior areas of Tamil Nadu. Replying to Mr.D. Chandrashekar's query on whether students without a 10th or 12th pass could join courses such as music, dance, art etc., (areas in which most dyslexic students excel) Mr. Gandhi said as President of Kalashetra, he would see if changes could be made regarding admission for such children.

Harini Mohan addressed the gathering on the signs and symptoms of dyslexia and what classroom teachers should look out for in order to detect children with dyslexia.

Vilasini Diwakar spoke about the importance and effectiveness of setting up resource rooms in schools to remediate children identified with dyslexia. She explained in detail the process of how Resource Rooms are set up, the training given to teachers for identification, assessment and remediation of such children. She also said that MDA monitors these Resource Rooms till they are ready to function on their own.

Mrs. Kaveri Padmanaban, Principal Vanavani Matriculation Higher Secondary School gave the audience a first hand report of the functioning of the Resource Room set up by MDA in her school. She spoke in detail of how it all began, the identification of 2 teachers to undergo training, identification of children who needed help, convincing the parents (who were relieved that they did not have to look for remedial help after school hours) and the programme followed by the children in the Resource Room. According to Mrs. Padmanaban, "Nothing can be done to help the children if they are not taught in a different way. She concluded by saying: "The students are actually learning and do not have an aversion to academic work is an achievement that speaks for itself."

After attending the programme, more than 15 schools have expressed interest in helping children with dyslexia. The Vivekananda Educational Society is also eager to find solutions for children with dyslexia in all their 20 schools.

A special mention must be made of the Rotarians and Rotaractors of the Rotary Club of Madras Central who put in a lot of work to make this programme a huge success.

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